Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2791

Name: MD 146 over Overshot Run

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended __X____

Criteria: ____A ____B __X__C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments:_____

_____

_____

Reviewer, OPS: _Anne E. Bruder_____ Date: __3 April 2001____

Reviewer, NR Program: __Peter E. Kurtze_____ Date: __3 April 2001____

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. BA-2791

SHA Bridge No. 3306 **Bridge name** MD 146 over Overshot Run

LOCATION:
Street/Road name and number MD 146 (Jarrettsville Pike)

City/town Sunnybrook **Vicinity** X

County Baltimore

This bridge projects over: Road____ **Railway**_____ **Water** X **Land** _____

Ownership: State X **County** _____ **Municipal** _____ **Other** _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ **No** X
National Register-listed district ____ **National Register-determined-eligible district** __
Locally-designated district _____ **Other** _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ **Truss -Covered** ___ **Trestle** ____ **Timber-And-Concrete** ___

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge ____:
Swing _____ **Bascule Single Leaf** __ **Bascule Multiple Leaf** _____
Vertical Lift _____ **Retractile**_____ **Pontoon** _____

Metal Girder X:
Rolled Girder _____ **Rolled Girder Concrete Encased** X
Plate Girder _____ **Plate Girder Concrete Encased** _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete _____:
Concrete Arch_____ **Concrete Slab**_____ **Concrete Beam** ____ **Rigid Frame** _____
Other _____ **Type Name** _____

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DESCRIPTION:

Setting: Urban _____ **Small town** _____ **Rural** _____X_____

Describe Setting:

Bridge No. 3306 carries MD 146 (Jarrettsville Pike) over Overshot Run in Baltimore County. MD 146 runs north-south and Overshot Run flows east-west. The bridge is located in the vicinity of Sunnybrook and is surrounded by farmland with some commercial development.

Describe Superstructure and Substructure:

Bridge No. 3306 is a 1-span, 2-lane, metal girder bridge. The bridge was originally built in 1940, and portions of the abutments were replaced in 1990. The structure is 27 feet long and has a clear roadway width of 25 feet. The out-to-out width is 27 feet. The superstructure consists of nine (9) girders which support a concrete deck and metal guard rails. The girders are approximately 8 inches x 25 inches and are spaced 2 feet, 6 inches apart. They are encased in concrete with timber infill placed between the bottom flanges of the girders, acting as forms for the concrete encasement. The roadway is carried on the girders. The concrete deck is 10 inches thick and it has a bituminous wearing surface. The roadway approaches are tangent, sloping down towards the bridge. The substructure consists of two (2) concrete abutments. There is one (1) flared, concrete wing wall. The sufficiency rating was unavailable.

According to the 1996 inspection report, this structure is in fair condition with moderate amounts of rust on the girders. The concrete abutments have moderate erosion on the faces with fine to 1/16-inch irregular cracks.

Discuss Major Alterations:

The original parapets were removed and replaced with guard rails at an unknown date. Inspection reports from 1996 detail the repair of both concrete abutments in 1990.

HISTORY:

WHEN was the bridge built: 1940
This date is: Actual X **Estimated** _____
Source of date: Plaque _____ **Design plans** ____ **County bridge files/inspection form** ____
Other (specify): State Highway Administration bridge files/inspection form

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

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WHY was the bridge altered?

The bridge was altered to correct functional or structural deficiencies.

Was this bridge built as part of an organized bridge-building campaign?

There is no evidence that the bridge was part of an organized bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

The bridge does not have National Register Significance.

Was the bridge constructed in response to significant events in Maryland or local history?

Metal girder bridges were most likely introduced and first popularized in Maryland by the state's major railroads of the nineteenth century including the Baltimore and Susquehanna, its successor the Northern Central, and the Baltimore and Ohio Railroad. Bridge engineering historians have documented the fact that James Milholland (or Mulholland) erected the earliest plate girder span in the United States on the Baltimore and Susquehanna Railroad in 1846 at Bolton Station, near present-day Mount Royal Station. The sides (web) and bottom flange of Milholland's 54-foot-long span were wholly of wrought iron and included a top flange reinforced with a 12x12-inch timber. Plates employed in the bridge were 6 feet deep and 38 inches wide, giving the entire bridge a total weight of some 14 tons. Milholland's pioneering plate girder cost $2,200 (Tyrrell 1911:195). By December 31, 1861, the Northern Central Railroad, which succeeded the Baltimore and Susquehanna, maintained an operating inventory in Maryland of 50 or more bridges described simply as "girder" spans, in addition to a number of Howe trusses. Most of these were probably iron girder bridges; the longest were the 117-foot double-span bridge over Jones Falls and the 106-foot double-span girder bridge at Pierce's Mill (Gunnarson 1990:179-180).

As in the nation, girder bridge technology in Maryland was quickly adapted to cope with the increasingly heavy traffic demands of the twentieth century caused by automobile and truck traffic. The 1899 Maryland Geological Survey report on highways noted that "there are comparatively few I-beam bridges, one of the cheapest and best forms for spans less than 25 or 30 feet" (Johnson 1899:206). Interestingly, the report also urged construction of a composite metal, brick, and concrete bridge, noting that "no method of construction is more durable than the combination of masonry and I-beams, between which are transverse arches of brick, the whole covered with concrete, over which is laid the roadway" (Johnson 1899:206). Whether any such bridges (transitional structures between I-beams and reinforced concrete spans) were built is unknown.

Official state and county highway reports—issued between 1900 and the early 1920s through the Highway Division of the Maryland Geological Survey and its successor, the State Roads Commission—generally do not reference or describe girder construction. An analysis of the current statewide listing of county and municipal bridges (a listing maintained by the State Highway Administration) reveals that 48 county bridges, out of the total of 141 approximately dated to "1900" by county engineers, were listed as steel girder, steel stringer, or variants of such terms. (It should be noted that the "1900" date is often given when no exact date is pinpointed for a bridge that is clearly old). A grand total of 200 bridges (including "steel culverts"), out of 550 bridges dated on

the county list between 1901 and 1930, were described as steel beam, steel girder, or steel stringer and girder varieties. The total suggests that among the various highway bridge types built in the early twentieth century metal girder bridges in Maryland between 1900 and 1930 were second in popularity only to reinforced concrete bridges. However, these numbers must be interpreted with caution, as they do not necessarily include all county and municipal bridges.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of the bridge had a significant impact on the growth and development of this area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

The bridge is located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

A significant example of a metal girder bridge should possess character-defining elements of its type, and be readily recognizable as an historic structure from the perspective of the traveler. The integrity of distinctive features visible from the roadway approach, including parapet walls or railings, is important in structures which are common examples of their type. In addition, the structure must be in excellent condition. The original parapets on Bridge 3306 have been replaced with guard rails. Because of this, its integrity of distinctive features visible from the roadway has been altered, making the structure an undistinguished example of a metal girder bridge.

Does the bridge retain integrity of important elements described in Context Addendum?

The bridge retains the character-defining elements of its type, as defined by the Statewide Historic Bridge Context including the original concrete encased, longitudinal girders and concrete abutments. However, distinctive features of the bridge as viewed from the roadway, such as the original parapets, have been altered.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?

The bridge is not a significant example of the work of a manufacturer, designer, and/or engineer.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

County inspection/bridge files _____ **SHA inspection/bridge files** X
Other (list):

Gunnarson, Robert
1990 *The Story of the Northern Central Railway, From Baltimore to Lake Ontario.* Greenberg Publishing Co., Sykesville, Maryland.

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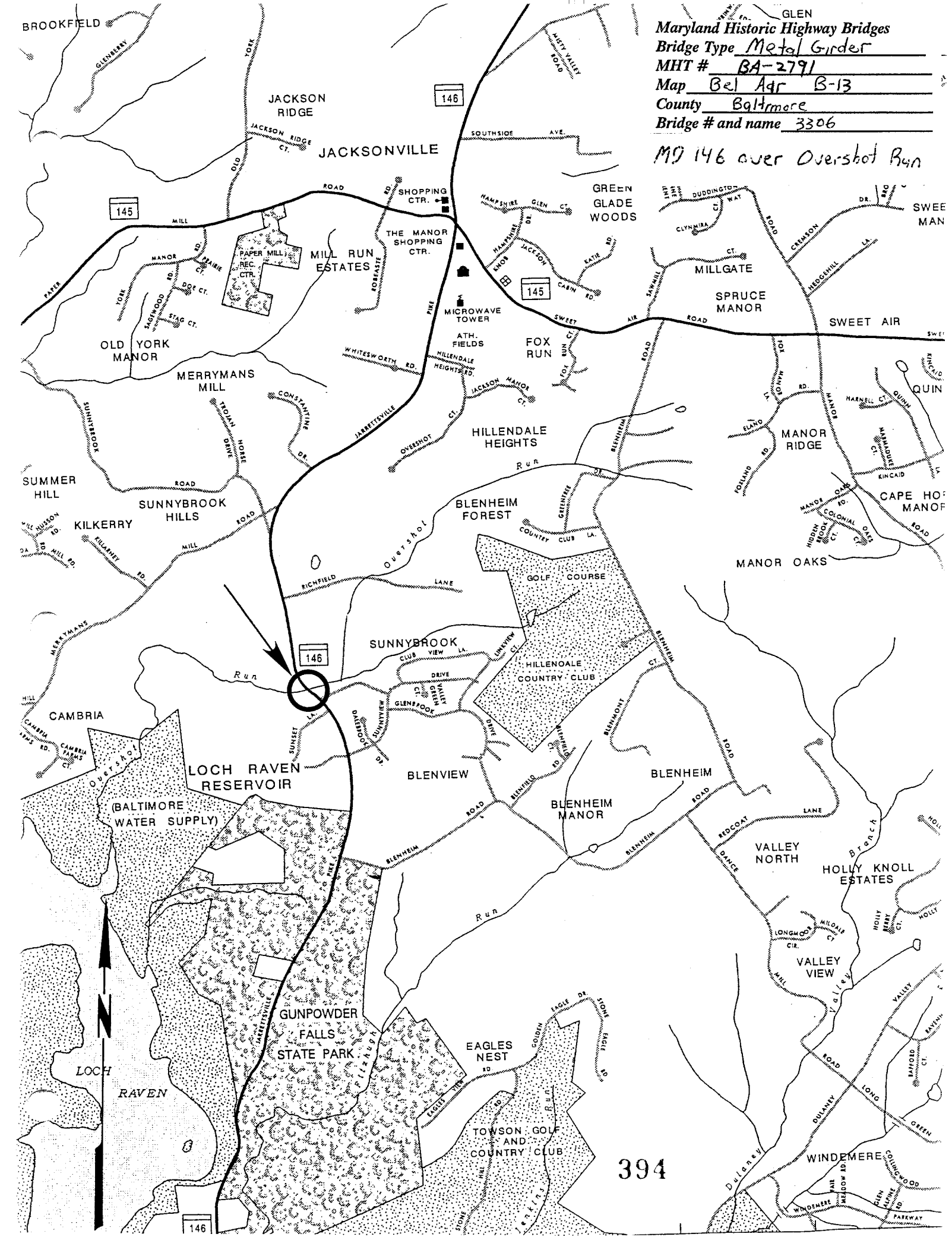
Johnson, Arthur Newhall
1899 The Present Condition of Maryland Highways. In *Report on the Highways of Maryland*. Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

Tyrrell, Henry G.
1911 *History of Bridge Engineering*. Published by author, Chicago.

SURVEYOR:

Date bridge recorded 2/27/97
Name of surveyor Caroline Hall/Eric Griffitts
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1685 **FAX number** (410) 296-1670


Maryland Historic Highway Bridges
Bridge Type Metal Girder
MHT # BA-2791
Map Bel Agr B-13
County Baltimore
Bridge # and name 3306
MD 146 over Overshot Run
BROOKFIELD
GLENBERRY
YORK
JACKSON RIDGE
JACKSONVILLE
MIGHTY VALLEY ROAD
SOUTHSIDE AVE.
OLD YORK ROAD
SHOPPING CTR.
GREEN GLADE WOODS
HAMPSHIRE GLEN CT.
HAMPSHIRE DR.
HAMPSHIRE KNOLL
JACKSON CT.
KATIE RD.
CABIN RD.
DUDDINGTON WAY
CLYNMIRA CT.
CRIMSON ROAD
HEDGEHILL LA.
MILLGATE CT.
SPRUCE MANOR
SWEET AIR ROAD
SWEE MAN
MILL ROAD
PAPER MILL RD.
MANOR RD.
PRAIRIE CT.
DOE CT.
STAG CT.
SAGEWOOD
PAPER MILL REC. CTR.
MILL RUN ESTATES
FOREASTE
THE MANOR SHOPPING CTR.
MICROWAVE TOWER
PINE
ATH. FIELDS
FOX RUN
FOX RUN CT.
FOX MANOR LA.
FOX MANOR RD.
OLD YORK MANOR
WHITESWORTH RD.
HILLENDALE HEIGHTS RD.
JACKSON MANOR CT.
MERRYMANS MILL
CONSTANTINE DR.
TROJAN HORSE DRIVE
SUNNYBROOK
JARRETTSVILLE
OVERSHOT CT.
HILLENDALE HEIGHTS
BLENHEIM
ELANO RD.
FOLLAND RD.
MANOR RIDGE
HARNELL CT.
QUINN
KINCAID
MARMADUKE CT.
SUMMER HILL
SUNNYBROOK HILLS
KILKERRY
KILLARNEY RD.
MILL NUSSON RD.
BLENHEIM FOREST
GREENTREE DR.
COUNTRY CLUB LA.
MANOR OAKS RD.
COLONIAL OAKS CT.
HIDDEN BROOK CT.
CAPE HO MANOR
MANOR OAKS
RICHFIELD LANE
GOLF COURSE
MERRYMANS MILL RD.
SUNNYBROOK
CLUB VIEW LA.
LINKVIEW CT.
HILLENDALE COUNTRY CLUB
BLENHEIM CT.
BLENHEIM ROAD
VALLEY GREEN CT.
GLENBROOK DRIVE
CAMBRIA
CAMBRIA HILLS RD.
CAMBRIA FARMS CT.
SUNSET LA.
OAKSIDE DR.
SUNNYVIEW
LOCH RAVEN RESERVOIR
(BALTIMORE WATER SUPPLY)
BLENVIEW
BLENFIELD RD.
BLENHEIM MANOR
BLENHEIM ROAD
REDCOAT LANE
DANCE
VALLEY NORTH
HOLLY KNOLL ESTATES
Run
LONGMOOR CIR.
MILDALE CT.
HOLLY BERRY CT.
VALLEY VIEW
MILL VALLEY ROAD
GUNPOWDER FALLS STATE PARK
PINEHURST
EAGLES NEST
EAGLE DR.
STONE EAGLE RD.
GOLDEN EAGLE RD.
EAGLES VIEW RD.
LOCH RAVEN
TOWSON GOLF AND COUNTRY CLUB
ERKIN
STONE HILL
BAYFORD CT.
LONG GREEN
DULANEY
WINDEMERE
COLLINGWOOD
MEADOW RD.
GLEN ALPINE PARKWAY
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1. BA-2791

2. MD 146 Over Overshot Run

3. Balto Co, MD

4. Eric Griffitts

5. 3/97

6. MD SHPO

7. W elevation

8 1 of 6

1: BA-2791

2. MD 146 over Overshot Run

3. Balto. Co. MD

4 Eric Griffitts

5. 3/97

6. MD SHPO

7. N approach

8. 2 of 6

1. BA-2791
2. MD 144 over Overshot Run
3. Ba Co. MD
4. Eric Griffitts
5. 3/97
6. MD SHPO
7. S approach
8. 3 of 6

1. BA-2791
2. MD 146 over Overshot Run
3. Balto Co MD
4. Eric Griffitts
5. 3/97
6. MD SHPO
7. east elevation of bridge
8. 4 of 6

1. BA-2791
2. MD 146 over Overshot Run
3. Balto Co., MD
4. Eric Griffitts
5. 3/97
6. MD SHPO
7. existing wings wall & repaired abut
8. 5 of 6

1. BA-2791
2. MD 146 over Overshot Run
3. Balto Co. MD
4. Eric Griffitts
5. 3/97
6. MD SHPO
7. girders & planking under bridge
8. 6 of 6